ABSTRACT OF THE DISCLOSURE

An apparatus and method for treating a mammal or other living organism having a heart and a peripheral vascular system to achieve a heart load reduction, said organism having a pulse rate and a systolic pressure resulting from the action of the heart, the method and apparatus involving the steps of measuring the heart rhythm, producing pressure pulsations in the peripheral vascular system by a non-invasive or invasive method in synchronization with the heart rhythm in the counterpulsation mode and varying at least one parameter of an input system generating said pressure pulsations to produce an optimised reduction in at least one of said pulse rate and said systolic pressure and hereby a net reduction in said heart load, said heart load being a function of said pulse rate and said systolic pressure.